

Supplementary Table S1. Primers used for construction of B5 mutants

Restriction enzyme sites are underlined. Amino acid substitutions are shown in bold type.

Name	Sequence (5'–3')
B5-1	TGCT <u>CTAGAG</u> CACTAGTCTCGACGTATACG
B5-2	CCC <u>AAGCTT</u> GGGCAACGCTTACAGAAACATCGC
B5-3	GTACAACGTCTTTCGAGAGAGTTCGTACACATATTGG
B5-4	CCAATATGTGTACGAACTCTCTCGAAAGACGTTGTAC
B5-5	GTAAACGCCACTATGATTATTTTGCTCAAATCTGTCTC
B5-6	GAGACAGATTTGAGCAAATAATCATAGTGGCGTTAAC
B5-A	GAAC <u>T</u> AACGCAGCATT <u>T</u> GTCTCCAGTGGCTGCTGGTCCCGCCGCTGCGACAGCTTTGAGCAA <u>A</u> CTC
B5-B	CAAAGCTGTCGCAGCGGCGGGACCAGCAGCCACTGGAGCAAATGCTGCGTTAGTTCGTACACATAT
B5-C	CTCGAAAGCCGTTGTACAATATGCACAAGCAATAGCATCGTTAGCAGCAACTTATCATATAATC
B5-D	AGTTGCTGCTAACGATGCTATTGCTTGTGCATATTGTACAACGGCTTTCGAGAGTTTGCTC
B5-E	GTACAATATGAACAAGAAATAGAATCGTTAGCAGCAACTTATC
B5-F	GATAAGTTGCTGCTAACGATTCTATTTCTTGTTTCATATTGTAC
B5-G	GTACAATATGAACAAGAAATAGCATCGTTAGCAGCAACTTATC
B5-H	GATAAGTTGCTGCTAACGATGCTATTTCTTGTTTCATATTGTAC
B5-I	GTACAATATGAACAAGCAATAGCATCGTTAGCAGCAACTTATC
B5-J	GATAAGTTGCTGCTAACGATGCTATTGCTTGTTCATATTGTAC
B5-K	GTACAATATGCACAAGCAATAGCATCGTTAGCAGCAACTTATC
B5-L	GATAAGTTGCTGCTAACGATGCTATTGCTTGTGCATATTGTAC
B5-M	GTACAATATGCACAAGCAATAGAATCGTTAGAAGCAACTTATC
B5-N	GATAAGTTGCTTCTAACGATTCTATTGCTTGTGCATATTGTAC